The following lists provide information on existing federal, state and local programs that reduce emissions of greenhouse gases and criteria air pollutants. Listed are program titles, implementing agencies, program incentive details, and emission reduction benefits. Each program also includes a link to sources of additional information about the program. The programs are listed in an order that highlights programs that are likely to be effective in Arizona. These lists can be used as a guide for municipalities that want ideas for voluntary programs that can help residents and businesses reduce their carbon footprint

# Emission Reduction Programs Implemented by States and Local Agencies

#### Climate Tech Finance

Implementing Agency/Location: Bay Area Air Quality Management District

Program Description: Offers subsidized loans for facilities to adopt new technologies that work to reduce greenhouse gas emissions.

Benefits: It works to encourage the implementation of emerging technologies that reduce GHG. These new technologies are defined as being successful in early stages but have not yet reached full scale production.

Source(s): Climate Tech Finance

# Food Production Investment Program

Implementing Agency/Location: California Energy Commission, California State-wide

Program Description: Provides funding to help food producers replace energy consuming systems and equipment with better alternatives.

Benefits: It helps facilities accelerate the adoption of new technologies that can reduce energy costs and GHG emissions.

Source(s): Food Production Investment Program

# Natural Gas Program

Implementing Agency/Location: California Energy Commission, California State-wide

Program Description: Supports projects that use technology to reduce GHG emissions from combustion sources.

Benefits: The projects funded through this program help reduce GHG emissions from natural gas through increased efficiency, improved natural gas infrastructure. This program supports the implementation of energy efficient and low-carbon technology, and development of alternative fuel options to diesel.

Source(s): Natural Gas Program

# Boulder Energy Challenge

Implementing Agency/Location: City of Boulder, Boulder, Colorado

Program Description: Grants support new business models, products, or service developments that work to remove barriers, change consumer behaviors, or encourage community engagement to reduce GHG emissions.

Benefits: Community opportunities for funding and involvement promote awareness of GHG emissions and participation in the solutions to improve air quality. The projects usually are more tailored toward the community's needs so it is more effective in the community and can provide jobs or other added benefits.

Source(s): Boulder Energy Challenge

### Governor's Aloha+ Challenge

Implementing Agency/Location: State of Hawaii

Program Description: State-wide initiative that identifies relevant goals, data, and helps track the sustainable development goals.

Benefits: Tracking GHG and other emissions generated from vehicle operation, energy production and other sources in an easy access, appealing dashboard helps the public to understand the impact of their efforts to reach the intended goal.

Source(s): Aloha + Dashboard Challenge

#### Alabama Saves

Implementing Agency/Location: ADECA (Alabama Department of Economic and Community Affairs)

Program Description: Provides Alabama business with loans to be used for improvements to fleet such as conversions, idle emission mitigations and buildings improvements such as lighting, HVAC, etc.

Benefits: Encourages businesses to adopt environmentally friendly improvements that overall increase energy efficiency to reduce contributions of GHG from energy generation and vehicle emissions.

Source(s): Alabama Saves

#### F-gas Reduction Incentive Program (FRIP)

Implementing Agency/Location: CARB (California Air Resources Board)

Program Description: Designates \$1m of incentives to promote use of different refrigerant technologies commercially and industrially.

Benefits: Hydrofluorocarbons (HFCs) are an extremely strong GHG. Limiting the level emitted is crucial to slowing climate change. In facilities with refrigeration, funding to switch to lower warming potential technologies reduces the use of the HFCs, risk of leakages, and sets guidelines for service practices.

Source(s): F-Gas Incentive Program

#### Greenhouse Gas Reduction Loan Program

Implementing Agency/Location: CalRecycle

Program Description: Funding supports new or increased infrastructure like anaerobic digestion facilities and facilities that create products from recycled plastic, fiber, or glass waste.

Benefits: Projects funded reduce methane emissions from landfills, provide new facilities to reduce GHG, upstream resource management and manufacturing processes. Projects benefit disadvantaged communities and creates jobs.

Source(s): Greenhouse Gas Reduction Loan Program

#### Community Air Grants

Implementing Agency/Location: CARB (California Air Resources Board)

Program Description: Provides financial support for community-based programs that reduce exposure to harmful air emissions.

Benefits: Community participation in air quality brings awareness to sources of toxic air pollutants and GHG and an opportunity to improve the situation.

Source(s): Community Air Grants

#### Greenhouse Gas Reduction Loan Program

Implementing Agency/Location: CalRecycle

Program Description: Funding supports new or increased infrastructure like anaerobic digestion facilities and facilities that create products from recycled plastic, fiber, or glass waste.

Benefits: Projects funded reduce methane emissions from landfills, provide new facilities to reduce GHG, upstream resource management and manufacturing processes. These projects also can benefit disadvantaged communities and creates jobs.

Source(s): CalRecycle Greenhouse Gas Reduction Loan Program

#### Self-Generation Incentive Program

Implementing Agency/Location: California Public Utilities Commission

Program Description: Provides rebates for energy system technology such as wind turbines, fuel cells, advanced energy storage installed on customer's end of the utility meter at residential or non-residential facilities.

Benefits: Energy Storage and self-generation system reduces the energy demand which reduces GHG emissions.

Source(s): Self-Generation Incentive Program (SGIP)

# UCAIR Grant Program

Implementing Agency/Location: Utah Clean Air (UCAIR)

Program Description: Provides grants to projects that reduce emissions, support research, and resources for the community that support clean air.

Benefits: The projects that are funded through the grant support the reduction of pollutants and further research related to air quality and GHG affects. The increase in programs and information is important to better understanding and mitigating air pollution which improves public health.

Source(s): <u>UCAIR Funding Opportunities</u>

#### New Technology Implementation Grant (NTIG) Program

Implementing Agency/Location: Texas Commission on Environmental Quality

Program Description: Supports the implementation of new technology and procedures that reduce emissions from stationary sources.

Benefits: Projects reduced the amount of emissions of regulated air pollutants that can contribute to GHG from stationary sources, energy generation, energy storage infrastructure and equipment.

Source(s): New Technology Implementation Grant (NTIG) Program

# Energy Innovation Grant Program

Implementing Agency/Location: Public Service Commission of Wisconsin

Program Description: Provides funding for towns, cities, county, tribal governments, school districts and manufactures to implement projects that support the reduction of energy consumption and costs.

Benefits: Reducing vehicle emissions from old fleets, implementing energy plans and training, and encouraging energy efficient infrastructure which reduce energy demand which reduces air emissions that contribute to GHG.

Source(s): Energy Innovation Grant Program

### Clean Cars 4 All

Implementing Agency/Location: California Air Resources Board (CARB)

Program Description: Provides incentives for lower income residents to scrap older cars and replace with zero-emission cars.

Benefits: Replacing high-emitting cars or eliminating cars in favor of alternative transportation reduces overall vehicle emissions that contributed to GHG.

Source(s): Clean Cars 4 All

# The Carl Moyer Program

Implementing Agency/Location: CARB

Program Description: A voluntary grant program that provides funding for companies and agencies to purchase cleaner vehicles, equipment or control technology.

Benefits: Traditionally high emitting vehicles such as locomotives and trucks can be replaced with a cleaner model or retrofitted with cleaner equipment which will reduce vehicle emissions. Applicable to many different industries.

Source(s): Carl Moyer Memorial Air Quality Standards Attainment Program

### Water Energy Grant Program

Implementing Agency/Location: California Department of Water Resources

Program Description: Provides funding for water efficiency projects that reduce water and energy use.

Benefits: Projects funded through this grant are commercial/institutional water efficiency programs, water programs that benefit disadvantaged communities, water conservation, and projects that reduce GHG and reduce energy use.

Source(s): Water Energy Grant Program

# Idle Free Salt Lake City

Implementing Agency/Location: Salt Lake City Government

Program Description: Provides resources such as idle free signs for parking lots, schools, and drive through areas.

Benefits: Public awareness about the effects of idling and reminders about it in everyday activities which will reduce vehicle emissions that can cause GHG.

Source(s): Idle Free, 10 Years of Idle Free

#### Clean Vehicle Rebate Program

Implementing Agency/Location: Oregon Department of Environmental Quality (ODEQ)

Program Description: Offer monetary incentives to drivers purchasing or leasing zero-emission vehicle. Provides additional support for low- or moderate-income households who want to participate in the program.

Benefits: Offer monetary incentives to drivers purchasing or leasing zero-emission vehicle. Provides additional support for low- or moderate-income households who want to participate in the program.

Source(s): Oregon Clean Vehicle Rebate Program

#### Clean Transportation

Implementing Agency/Location: State of Washington

Program Description: Makes EV more accessible by providing discounts on sales tax, eliminating sales tax on the purchases of zero emission buses, created new grant program to help transit agencies change their fleet, and prioritizes the conversion of ferry fleet.

Benefits: Changing the fleet to EV or electric hybrid and encouraging the public to purchase vehicles that will help reduce contributions to GHG emissions.

Source(s): Washington Clean Transportation Plan

#### Municipal Zero-Emission Vehicle Rebate and Infrastructure Grant

Implementing Agency/Location: New York State Department of Environmental Conservation

Program Description: Provides cities and towns with rebates to purchase new zero-emission vehicles for fleet and funds to install hydrogen fuel equipment and related infrastructure such as EV charging locations and equipment (EVSE).

Benefits: Creating the infrastructure needed to support EVs and encouraging the public to purchase vehicles that will help reduce contributions to GHG emissions.

Source(s): Grant Funding for Municipalities

#### Low Carbon Fuel Production Program

Implementing Agency/Location: California Energy Commission

Program Description: Supports the implementation new and increased renewable ultra-low-carbon transportation fuels on a commercial scale.

Benefits: The grant encourages facilities to produce low carbon transportation fuel which reduce vehicle emissions that contribute to GHG.

Source(s): Low Carbon Fuel Production Program

#### Charge NY

Implementing Agency/Location: New York State Energy Research and Development Authority (NYSERDA)

Program Description: State-wide initiative to encourage the public to switch to EVs by offering a Drive Clean Rebate, New York State Truck Voucher Incentive Program for dealers, and promoting the installation of charging stations.

Benefits: Changing the fleet to EV or electric hybrid and encouraging the public to purchase vehicles that will help reduce contributions to GHG emissions.

Source(s): Charge NY

# Seaport and Rail Yard Areas Emission Reduction Program (SPRY)

Implementing Agency/Location: Texas Commission on Environmental Quality

Program Description: Incentivizes the replacement of old drayage trucks at seaports and railyards in areas deemed non-attainment areas.

Benefits: Reduce contributions of the amount of NOx emitted from various vehicles and equipment, especially diesel sources.

Source(s): Seaport and Rail Yard Areas Emissions Reduction (SPRY) Program

## **Federal Emission Reduction Programs**

EPA Center for Corporate Climate Leadership

Implementing Agency: Environmental Protection Agency (EPA)

Program Description: This program provides comprehensive resources to help organizations of all sizes measure and manage GHG emissions, providing technical tools, ground-tested guidance, educational resources, and opportunities for information sharing and peer exchange among organizations interested in reducing the environmental impacts associated with climate change.

Benefits: This program helps businesses reduce greenhouse gas emissions. They have tools to help businesses accurately inventory their emissions and technical tools to help business make reductions in an effective manner.

Source: <a href="https://www.epa.gov/climateleadership/about-center-corporate-climate-leadership/">https://www.epa.gov/climateleadership/about-center-corporate-climate-leadership/</a>

## Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Implementing Agency/Location: Federal Highway Administration (FHWA)

Program Description: Provides funding to state or local entities to support transportation projects that contribute to air quality improvements and reduce congestion.

Benefits: The federal funding encourages transportation agencies to implement projects and use equipment that reduce vehicle emissions that contribute to GHG.

Source(s): <a href="MAQ Program Features">CMAQ Program Features</a>

# Diesel Emissions Reduction Act (DERA)

Implementing Agency/Location: Environmental Protection Agency (EPA)

Program Description: Funds projects that reduce diesel emissions from fleet operations.

Benefits: Reduction of diesel emissions from mobile sources is important in reducing the amount of air pollutants that contribute to GHG emissions.

Source(s): National Grants: Diesel Emissions Reduction Act (DERA)

# Database of State Incentives for Renewables & Efficiency (DSIRE)

Implementing Agency/Location: NC Clean Energy Technology Center

Program Description: National database that allows users to search by zip code for programs, policies, tax credits, grants, and incentives related to energy efficiency, renewable sources.

Benefits: Ability to easily search and find programs, incentives, and grants designed to reduce GHG emissions available.

Source(s): Database of State Incentives for Renewables & Efficiency (DSIRE)